



October 5, 2023

Mark Rothfork
Lead Permitting Specialist
ITC Midwest, LLC
20789 780th Avenue,
Albert Lea, Minnesota 56007

Re: Northern Long-Eared Bat Habitat Assessment Report for the Iowa Segment 2 of the
Cardinal-Hickory Creek Transmission Line Project

Dear Mr. Rothfork:

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) conducted bat habitat assessment for the Iowa Segment 2 portion of the Cardinal-Hickory Creek Transmission Line Project (Project) in Clayton County, Iowa (Figure A-1 in Appendix A). The majority of the Project area is within the Upper Mississippi River National Wildlife and Fish Refuge (Refuge). The Project is within the range of the federally endangered northern long-eared bat (*Myotis septentrionalis*). Although the Project has been sited to avoid tree clearing, some amount of tree clearing will be required to get construction equipment and building materials onto the site. Therefore, a habitat assessment was conducted to determine the quality and extent of northern long-eared bat habitat present on the Project site.

METHODS

The habitat assessment included both a desktop and field component. Aerial imagery was reviewed to delineate the extent of forested habitat within the Project area. The field assessment was conducted on September 27, 2023 by Burns & McDonnell wildlife biologist Cara Rogers. The methods followed Appendix A of the U.S. Fish & Wildlife Service (USFWS) *Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidelines*. Forest habitat was evaluated, and representative photos were taken at locations where tree clearing will need to take place. Potential roost trees for northern long-eared bats were defined as trees with at least three inches diameter at breast-height (dbh) with sloughing bark, cracks, crevices, or hollows.

RESULTS

The Project is located within the Blufflands and Coulees Level IV Ecoregion. The Project area surveyed consisted of agricultural fields, forests, existing right-of-way (ROW), and federally owned land. Forested habitat was generally upland hardwood forest. Dominant tree species included black walnut (*Juglans nigra*), eastern cottonwood (*Populus deltoides*), black maple (*Acer nigrum*), white ash (*Fraxinus americana*), boxelder (*Acer negundo*), northern red oak (*Quercus rubra*), black locust (*Robinia pseudoacacia*), and shagbark hickory (*Carya ovata*). In addition to the forested habitat, there were multiple areas of low, early successional trees and shrubs like staghorn sumac (*Rhus typhina*), eastern redbud (*Cercis canadensis*), sandbar willow (*Salix interior*), and black cherry (*Prunus serotina*). Potential bat roost trees were present and scattered throughout the forested areas. No sign of caves or mines were observed on site. Representative photos are provided in Appendix B.



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No potentially suitable habitat areas for the northern long-eared bat was identified within the portion of the Project within the Refuge due to lack of trees with suitable roost characteristics. (Figure A-1). Additionally, mist-net and acoustic surveys conducted in 2020 for the portion of the Project within the Refuge did not find or identify any northern long-eared bats. Within the non-Refuge portion of the Project area, an estimated 1.5 acres forested areas proposed to be cleared are considered potentially suitable for the northern long-eared bat (Figure A-1).

CONCLUSION

Based on the September 2023 assessment, it is Burns & McDonnell's opinion that some portions of the Project area contain potentially suitable roosting habitat for the northern long-eared bat as shown in Figure A-1. This determination is further supplemented by the 2020 mist-net survey and acoustic results in the portion of the Project in the Refuge, which did not result in any northern long-eared bats being identified.

For the identified potentially suitable areas for northern long-eared bats, it is recommended that tree clearing is implemented during the winter when bats are hibernating, typically between November 15 and March 31. If tree clearing occurs only during this timeframe, it is Burns & McDonnell's opinion that Iowa Segment 2 of the Cardinal-Hickory Creek Transmission Line Project **may affect, but is not likely to adversely affect** the northern long-eared bat. Burns & McDonnell recommends this report be provided to USFWS for official review and concurrence.

Sincerely,

Cara Rogers
Assistant Biologist

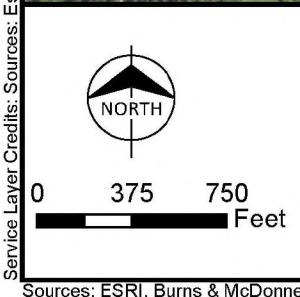
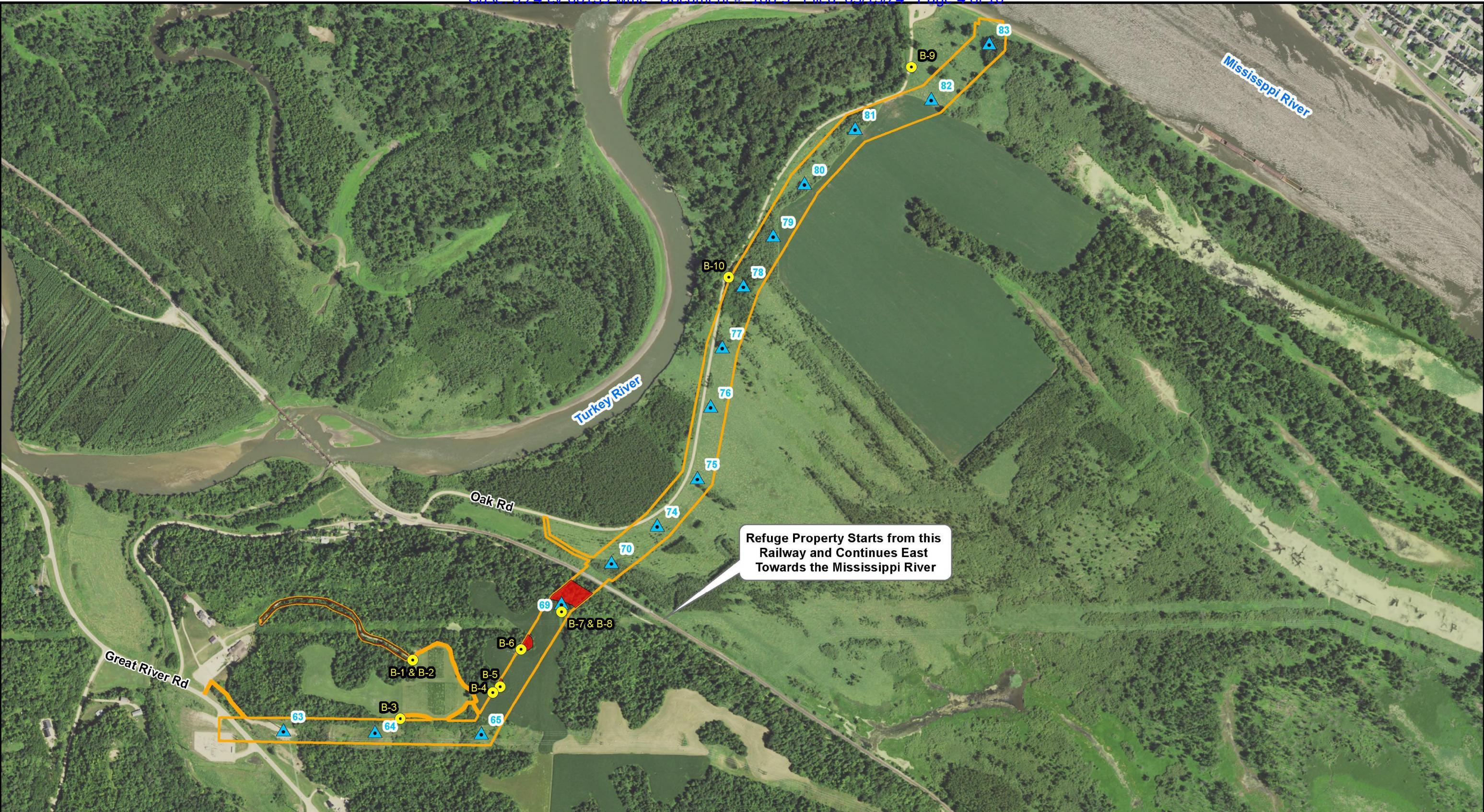
A handwritten signature in black ink that reads "Cara Rogers".

Attachments:

- Appendix A – Figures
- Appendix B – Site Photographs

cc: Tyler Beemer, Burns & McDonnell

APPENDIX A – FIGURES



- ▲ Proposed Structure
- Photo Point
- Identified Potentially Suitable Habitat for the Northern-Long Eared Bat
- Survey Area

Sources: ESRI, Burns & McDonnell Engineering, NAIP Aerial Imagery (2022)

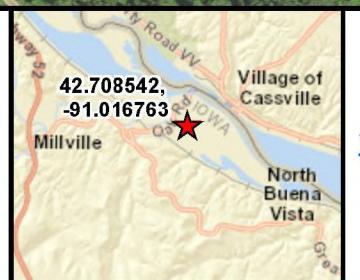
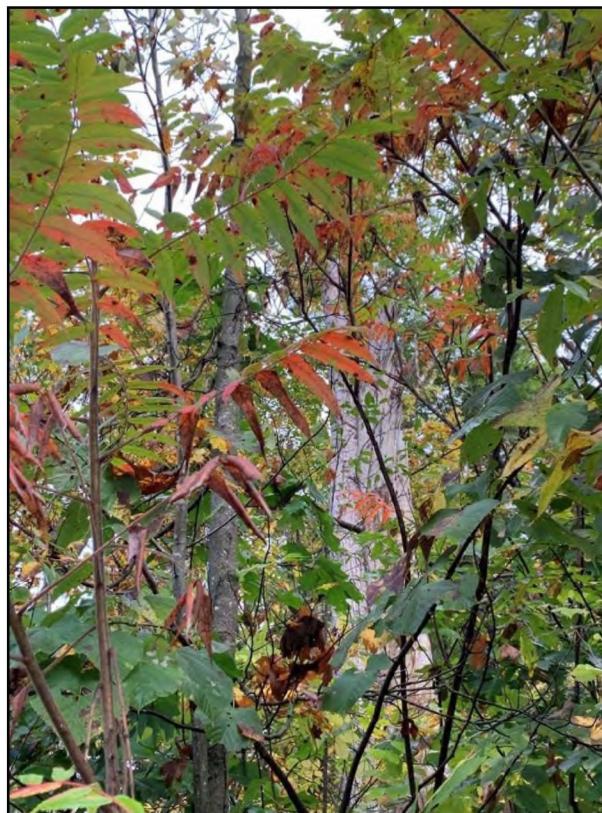

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Figure A-1
General Location & Results
Bat Habitat Assessment
Iowa Segment 2 of the
Cardinal to Hickory Creek
345-kV Transmission Line Project
Clayton County, Iowa

APPENDIX B – SITE PHOTOGRAPHS



Photograph B-1: View of the main road up to the top of the site with anticipated tree clearing of 15 feet on each side.



Photograph B-2: View of suitable bat roosting snag through the trees along the main road up to the site.

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Site Photographs
September 27, 2023
Clayton County, Iowa



Photograph B-3: Not potential roost trees, early successional and shrub species, facing proposed access road to structure 64.



Photograph B-4: Potential roost trees, facing proposed access roads on the east side of the winery.

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Clayton County, Iowa



Photograph B-5: Potential roost trees within the ROW, facing north.



Photograph B-6: Potential roost trees in the ROW, facing north.

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Photograph B-7: Potential roost trees, looking at proposed structure 69, facing northeast.



Photograph B-8: Potential roost trees, looking at structure 69, facing northwest.

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Site Photographs
September 27, 2023
Clayton County, Iowa



Photograph B-9: Unsuitable roost trees on USFWS refuge, in the proposed ROW, facing east.



Photograph B-10: Unsuitable roost tree, facing towards proposed structure 78, facing east.

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